Building Permitting Panel

Discussion Paper

ISSUE OVERVIEW

Some local building and construction permitting requirements are seen as limiting the growth of the market for small scale renewable energy installations in California. These permitting barriers can result from a specific jurisdiction's requirements or practices, but the challenge is made particularly acute by the wide variation across public agencies in permitting requirements, application submittal and review processes and fee levels.

We all recognize that building permits are necessary and important to ensure life safety, protect building integrity and project quality and community integrity, They are also important because the construction of renewables on already sited and permitted homes, businesses and facilities, particulary for self-generation purposes, may not receive any other state or local oversight. However, some developers and advocates still find that that many jurisdictions subject these renewable power projects to requirements that are overly strict or unnecessarily convoluted, causing significant and unnecessary costs and uncertainty for project developers and investors.

Complicated and possibly confusing processes may also compound a problem that many jurisdictions face – poorly prepared permit applications from developers. While responsibility for poor quality submittals lies with developers, complex requirements likely worsen this problem. Individual public agencies overseeing these processes may not have the time, money and expertise to dedicate to studying and redesigning their building and construction permit processes to reduce review costs while still ensure installations are done safely and properly..

This panel looks at whether a consistent, streamlined permitting process is possible, and at what geographic and project level. We will attempt to answer the questions: What aspects of the building and construction permit process can be standardized? To what extent is it appropriate to standardize these processes? Is there a way to phase in a statewide streamlining effort? Lastly, we will discuss the challenges facing jurisdictions who may consider permitting reform and brainstorm opportunities to provide support and outreach to those jurisdictions.

CAVEATS

Public agencies want to encourage investment in their communities, especially in clean energy, as it improves the economic and environmental health of the community. Similarly, installers and developers want to ensure the safety of the consumer and it is not in their interest to install subpar or unsafe projects. The panel is focused on permitting for photovoltaic, as it is a renewable energy segment that has reached a maturity and scale, and where some permitting processes have slowed adoption of renewables. Other renewable energy technologies will benefit from the lessons learned from PV permitting reform.

BACKGROUND

Renewable energy developers in California seek simplified, less expensive and standardized building and construction permits across the state. Developers recognize permitting requirements as appropriate and necessary and acknowledge that situations do exist when requirements must vary. At the same time, many have expressed concerns that permitting costs and timeframes increase the cost of renewable energy without improving the quality of the installation.

Local permitting processes for solar do vary widely, with some jurisdictions having very streamlined programs. However, many local permitting processes include elements like required hard-copy application submittal, lengthy review periods, and multiple inspections. Developers explain that each of these requirements drives up installation prices and reduces the cost competitiveness of renewable energy to other forms of available energy. Recent studies have validated this concern. Analysis by SolarTech found that non-hardware 'soft' costs can account for over 50 percent of PV system costs and CalSEIA[1] has found that jurisdictions demonstrate a wide variation in permitting performance.

Concerns about building and construction permitting costs and complexity are most acute among renewable companies that focus on small installations such as residential rooftops. Costs associated with permitting projects of this small size comprise a larger

[1] http://calseia.org/local-permits.html

share of overall project costs than larger projects. Concerns from this category of PV installers include:

- Unclear or inconsistent requirements
- Inconsistent interpretations by inspectors
- Lengthy application reviews and inspection windows
- In-person and hard copy submittal requirements
- Permit fee variation and methodology
- Stringent structural engineering requirements
- Unecessary fire setbacks

All agree that local government's main charge is to protect safety through ensuring project quality and that current permit processes are intended to meet this responsibility. Expending resources to establish new procedures or a separate permitting process only for solar is not generally recognized as a top priority given the current fiscal health of most jurisdictions. Many of these jurisdictions also point out that any changes cannot put additional strain on resource constrained building departments and request for permit fee reductions are challenging.

Despite fiscal constraints, many jurisdictions have recently taken steps to streamline their processes in order to reduce the cost of renewable energy installations. These local governments have changed processes to address installers' concerns without sacrificing the quality of their review process. Examples include:

- Permitting submittal and review.
    - Santa Clara County accepts email applications
    - Cities in SMUD territory are using an online system for small residential PV projects
- Permit application review and fees.
    - LA County has set timeframes for approval
    - Some jurisdictions have waived permit fees, or developed a transparent fee calculation method

- Variance among jurisdictions.
    - Butte County is leading a multi-county effort to draft a model permit and approval process
    - Green Corridor (8 city collaboration)
    - Trichapter uniform code (simplified permitting guidelines similar to SolarABCs)

Local jurisdictions that either have made changes or are interested in changing their permitting processes have identified important criteria for their permitting of renewable energy installations that will inform potential solutions:

- Cost recovery for permitting review: By law, the costs charged by local jurisdictions for permitting cannot exceed the amount required to cover the cost of that activity. But, based on the local agency, or *authority having jurisdiction's* (AHJ's) processes, costs may vary significantly.
- Compliance: AHJ's must confirm compliance with relevant state and local building codes, including National Electric Code, State Building Code and local building codes.
- Public health and safety: AHJ's must protect lives from electrical shock, fire or structural failure: :
    - Setting fire set-backs and other rules to minimize fire danger[2].
    - Checking that a building's roof can support the proposed renewable energy installation. Some installations may require a licensed engineer to provide structural calculations and details for reinforcement of the existing roof structure.
    - Reviewing for appropriate power disconnects for safety of servicing and fire fighter safety.
    - Checking for signage. The National Electricity Code and state fire guidelines require certain hazard signage standards. Some local jurisdictions and utilities require their own signage requirements which can mean up to four required signs with similar information on the same installation

[2] The California Department of Forestry & Fire Protection and State Fire Marshal are revising regulations for this area of regulation, and will discuss them elsewhere at this conference.

- Carrying out inspections. Some jurisdictions require inspections during the installation process as well as after the installation is completed.
- Monitoring to be sure that certified, licensed experienced professionals carry out installation

CHALLENGES

The panel will review several jurisdictions that have demonstrated that permitting can be simplified and made more affordable for installers without sacrificing safety and compliance. However a range of challenges exist for many jurisdictions that have not yet achieved these improvements:

Permitting Complexity & Delay

Application Submittal: Digitizing the application submittal process could create benefits for both installers and AHJ's reviewing the applications. However, developing software tools for a new system is generally out of the question for most jurisdictions. Many AHJ's are dealing with legacy technology systems and require multiple hard copies to be submitted for review.

Questions:

1. Do some installations (size, customer type) require less documentation which could be submitted by email in attachments?
2. Would a shared infrastructure platform (e.g. statewide web portal) lower the costs for jurisdictions?
3. What type of work would need to occur in jurisdictions to connect to such a tool?

Time limits for permit review and inspection windows: Lengthy application review and inefficient inspection programs and procedures add complexity and increase cost. Challenges to improving these areas include:

- Inadequate staff to complete timely review of permits requests due to backlog of other work.
- Some jurisdictions report that delays sometimes result from poor preparation by installers, including inconsistencies between the plans submitted and actual field conditions.
- Different size and project complexity require different levels of review and one-size-fits all time deadline for review of permits could be unrealistic. In many

cities, buildings have different roof structural systems and require different permit processing times.

Questions

1. Is it feasible to identify different categories of projects and provide different review times based on the complexity or size of the project?
2. Would a uniform guidelines create more certainty and clarity about what is required by the guideline thereby expediting application review?
3. Can a web based application system prohibit submittal of incomplete applications?
4. Is it possible to shorten inspection times to a specific times of the day (e.g. scheduling inspections for a maximum window of 4 hrs, similar to cable or phone installations) for certain small projects which are disproportionately impacted by lengthy inspection windows?

Permitting costs

Some jurisdictions have waived permitting fees for renewable energy installations and hence subsidized permitting review. This is unlikely to be a sustainable and widespread option for local governments given public budgets. Other jurisdictions maintain high fees based on either complex review requirements and or have developed a permit fee calculation methodology (valuation method).

Questions

1. Would an expedited permit process reduce review time and consequently permit fees for standard systems?
2. Would outsourcing permit review for either complex or typical systems reduce costs?
3. If standardization occurs does outsourcing become less expensive?

Variation among jurisdictions

Permitting and approving localized renewable energy is inherently a local government function, and so it is not surprising that there is a great deal of diversity and variation between jurisdictions in permit requirements, costs and timeframes. As an example of this, several studies have indicated a great difference in permitting costs among

California communities.[3] Standardization of requirements between jurisdictions is widely predicted to bring down project costs and reduce permitting as a barrier to renewables expansion more efficiently and effectively that focusing on helping individual jurisdictions improve their own programs. But standardizing permitting is not simple:

- Geographic or regional requirements: Some conditions such as snow load, wind or building construction and age of housing stock that differ by location may require different standards
- Partial or delayed adoption of codes and standards: Many jurisdictions have not adopted the latest version of a code or have only partially adopted guidelines, creating an uneven base from which to create uniformity.
- Local zoning and building code issues: Variation amongst jurisdictions' building and zoning codes may limit the extent that standardization could occur, or require overhaul of those codes.
- Existing work flow and culture: AHJ's may have practices or policies that they feel are necessary that do not match a recommended practice; or staff and managers may have no real external incentive to change those policies, standards or practices.
- Sheer number of AHJ's and the difficulty in persuading local governments to use new non-locally created standards.

PROMISING SOLUTIONS

Permitting Complexity & Delay

Many cities have proven that their building and construction permitting process can be simplified and made more affordable while maintaining necessary standards. One key is to identify what such improvements are widely transferable across the state's local jurisdictions. Thought of in another way: what are the least complex and shortest processes in existence in California to review and approve permits?

Projects of different sizes and complexity could have different requirements. Perhaps California should require using the standard process proposed by the Solar ABC's as a baseline.

http://www.solarabcs.org/about/publications/reports/expedited-permit/

[3] Entities like Vote Solar and the local chapters of the Sierra club have researched permitting fees and reported on the range of costs

Google has developed the basics to create an online application submittal process. An entity could further develop this for a regional or statewide web portal to submit applications to multiple participating jurisdictions.

Permitting costs

A collaborative effort must take place between local governments and industry to better understand the components of permitting costs for jurisdictions and how these costs can be minimized. Many installers say that they would be happy to pay a reasonable fee if the process was consistent, reasonable and expedient.

Jurisdictions have also suggested more accurately tiering rates based on the complexity of the installation. Small, standard installations would lead to a minimal fee while larger and/or more complex installations would generate fees that reflect the additional personnel resources required for review and permit approval.

Variation between jurisdictions

Local governments within specific regions are demonstrating success in standardizing permitting guidelines among several jurisdictions. The renewable energy industry and state government should vigorously support these efforts, as they are the proving ground for permit standardization.

Agencies within other regions should initiate and support similar standardization efforts and the state should implement or expand the adoption of standard approaches throughout California.

Next steps toward increasing standardization include:

1. Achieve agreement at various levels of government that consistency and appropriate streamlining is important
    a. Provide leadership vision and make the economic case for change
2. Develop and offer good regional municipal role models
    a. Better understand what vintage buildings require structural mitigation, at what weight and system size
    b. Provide guidance related to Fire Marshall inspections
3. Adopt a strategy for achieving better inspection results.

a. Provide inspector training

b. Leverage knowledge gained from regional pilots and utlitize DOE grants for additional pilots

c. Identify tools and support that the state could provide

California may be best served by phasing in standardized permitting through expansion of regional efforts. Standards could be consistent in the most important areas of life safety and product quality while allowing for some flexibility by location. Passing resources – both informational and financial -- to local jurisdictions for implementation and evaluation is tremendously important. Ultimately, local governments and developers should together assess regional approaches and determine whether statewide standards are appropriate and feasible.

Important Questions to Pursue

- How can best practices be shared with local jurisdictions, and how can local jurisdictions be encouraged and supported to improve their practices in a budget and personnel constrained environment?
- Many jurisdictions have expressed a willingness to pursue standardizing of their permitting processes. Good work toward this end is occurring. How can we expedite and expand standardization?
- Should we aspire to statewide standardization of local permitting requirements? It there any precedent that suggests that such a goal is feasible? Or should we support regional efforts already in place (East Bay Area, Redwood Empire, etc.) and attempt to seed regional efforts where they don't currently exist?
- To what extent can information technology tools advance these goals and how can we leverage the state's wealth of expertise in this area to improve permitting?

SUMMARY

Both local governments and developers want to add to prosperity and improve the health and environment of California's communities. Consumers should be able to acquire successful renewable energy products at competitive costs. Local governments and industry can jointly build support for these products by ensuring safe installations, without lengthy delays, unnecessary complexity and at costs that are widely accessible. Improving the permitting process is achievable and actionable and in all parties' long-

term best interest. Creating a process, endorsed by the state that facilitates collaboration between and among jurisdictions and installers is a necessary first step.
